

WHAT IS CLAIMED IS:

1. A system for folding a cutting blade, which is used for sheet material molding, in a shape conforming to a desired sheet material molding configuration, the system comprising:

a transferring unit for transferring the cutting blade;

cutting means, situated between said transferring unit and a guide nozzle, for cutting the cutting blade, which is supplied from said transferring unit, in a length substantially corresponding to the sheet material molding configuration, wherein a cutting tip is preserved on the cutting blade;

a guide member of a hollow shape, interposed said cutting means and a folding means and configured to connect said cutting means and the folding means, said guide member having a passage for guiding the cutting blade through the cutting means to the folding means;

folding means, supported such that it may be revolved and moved in a straight line direction for applying a force against the cutting blade passing through the guide member, the folding means positioned adjacent said guide member, and for folding the cutting blade to a predetermined angle, the folding means including at least two folding members;

first driving means configured to engage said folding means, for revolving and driving the folding means against the cutting blade, and

second driving means configured to engage said folding means and move at least one of the folding members of said folding means to a position adjacent the cutting blade, prior to driving the first driving means;

wherein said folding means comprises a supporting frame comprised of at least two plate shaped members, the guide member positioned between the at least two plate shaped members; a fixing body having a predetermined length and a guide entrance operatively connected with said guide member, wherein ends of the fixing body are rotatably fixed to the supporting frame, the fixing body having a guide slot formed therein for insertably receiving a folding member; and a pair of rotary bodies, rotatably connected to the ends of the fixing body for revolving the folding members, said pair of rotary bodies having a pair of guide holes formed therein for insertably receiving the folding members.

2. The system for folding a cutting blade as claimed in claim 1, wherein the at least two folding members having a substantially triangular cross-section.

3. The system for folding a cutting blade as claimed in claim 1, wherein said guide entrance further comprises supporting means for moving the cutting blade in a predetermined channel.

4. The system for folding a cutting blade as claimed in claim 3, wherein said supporting means comprises an elastic member.

5. The system for folding a cutting blade as claimed in claim 3,
wherein said supporting means comprises a magnetic substance.

6. The system for folding a cutting blade as claimed in claim 1,
wherein said first driving means comprises:
a first toothed portion set on the pair of rotary bodies;
a second toothed portion set on both ends of a rotating shaft installed on
the supporting frame, the second toothed portion configured to mesh with the first toothed
portion; and
a servo motor coupled to the rotating shaft for rotating the rotating shaft.

7. The system for folding a cutting blade as claimed in claim 1,
wherein said second driving means comprises a cylinder, direct-connected to the folding
members for moving the folding member into and out of engagement with the pair of
rotary bodies.

8. The system for folding a cutting blade as claimed in claim 1,
wherein said cutting tip of the cutting blade is detached in a folding work process of the
cutting blade.

9. The system for folding a cutting blade as claimed in claim 1,
wherein the folding members are configured and dimensioned such that they are capable of
connecting said pair of rotary bodies to each other through the guide holes of the pair of
rotary bodies and the guide slots of the fixing body.

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